THE FIRST AND ONLY JOURNAL DEVOTED TO SPIRIT AND DRUG NEUROSIS

Volume 32, Number 3 ESTABLISHED 1876 Subscription $2.00 a Year

DEC 23 1910

THE JOURNAL OF INEBRIETY

OFFICIAL ORGAN OF THE AMERICAN MEDICAL ASSOCIATION FOR THE STUDY OF INEBRIETY AND NARCOTICS

EDITED BY T. D. CROTHERS, M. D.

COLLABORATORS

WINFIELD S. HALL, M. D., Chicago, Ill.
H. O. MARCY, M. D., Boston, Mass.
L. D. MASON, M. D., Brooklyn, N. Y.
ALEXANDER MAC NICHOLL, M. D., N. Y. City
W. L. HOWARD, M. D., Westboro, Mass.
D. R. BROWER, M. D., Chicago, Ill.
JOHN MADDEN, M. D., Portland, Ore.
J. H. KELLOGG, M. D., Battle Creek, Mich.
PROF. MAX V. FREY, Wurzburg, Germany
PROF. JUSTUS GAULE, Zurich, Switzerland
DR. JOHN BERGMAN, Norrkobiug, Sweden
PROF. MAX KASSOWITZ, Wein, Prussia
T. N. KELYNACK, M. D., London, Eng.
ROBERT JONES, M. D., London, Eng.
W. MCADAM ECCLES, M. D., London, Eng.
W. E. SULLIVAN, M. D., London, Eng.

AUTUMN, 1910

ORIGINAL ARTICLES

RICHARD G. BADGER, PUBLISHER, THE GORHAM PRESS, BOSTON

Entered as second-class mail matter at the post office at Boston, Mass.

THE JOURNAL OF INEBRIETY

AUTUMN, 1910

PROCREATION DURING INTOXICATION

DR. H. HOPPE, OF KOENIGSBURG, GERMANY. TRANSLATED AND ABRIDGED BY KENT OAKLEY BROWN, M. D., ASST. PHYSICIAN WALNUT LODGE HOSPITAL, HARTFORD, CONNECTICUT.

THAT great difficulty confronts us, in being absolutely assured that procreation has occured during intoxication, and that it is equally difficult to determine, beyond question, just when one becomes intoxicated, is the opinion of Naecke. "Intoxication" is a term for a mental disturbance, resulting from a plentiful use of alcoholic beverages; but there are degrees of this condition that are difficult of recognition. We observe the intoxication for the want of a better guide, in determining the amount of alcohol taken: altho as physicians, we know it is not a safe rule.

In the matter of procreation, while under the influence of alcohol, the mental condition is not at all essential; importance attaches only to the amount of alcohol circulating in the blood of one or both persons concerned in the act. Whether alcohol, ingested previous to cohabitation, usually results in inferior children, and what amounts suffice to bring about such a result, are therefore subjects of discussion in this article. Definite conclusions concerning human offspring are very difficult to reach, and the matter can only be settled by animal experimentation.

My experiments upon dogs two years ago were a failure; for altho the sexes were separated for sometime to heighten their sexual desire, when the male was given alcohol, he sat stupid beside the sober female, and the alcoholized female would not tolerate the approaches of the sober male, and

they did not copulate at all. The amount of alcohol allowed was not insignificant, eighteen minims per pound of body weight; for I thot such quantities necessary to obtain decided effect on the offspring; since Latinen had used these amounts in his earlier experiments to test the ability to withstand bacterial invasion. I was no more successful with two-thirds this amount. Thru lack of material, my purpose to continue with from one-third to one-half the amount has not as yet been attained.

Even tho no distinct degeneration results, as small amounts as two or three minims per pound equal to five to eight drachms of absolute alcohol, or one to one and a half pints of beer, for an adult weighing one hundred and thirty-two pounds, may be sufficient to cause a certain inferiority in the young; as, less body weight, tardy growth or less ability to withstand toxins. Results must be checked by comparison with normal offspring.

Altho exact proof is wanting, not only is there a widespread acceptance of this view, but there are so many instances supporting it, that they give the appearance of proof.

The view is historic. The Roman-Grecian legend has it, that the misshapen Vulcan was begotten by Jupiter, while intoxicated on nectar. Diogenes, so Plutarch wrote, told a degenerate youth, that his father begot him while drunken. An old Carthaginian law interdicted the use of alcoholics on the day of cohabitation. Lykurgus instituted a similar prohibition. Such convictions, crystalized into regulation by law, must have had the support of many concrete examples of cause and effect in degeneracy.

Opportunities for making ready and striking observations were probably presented in those days, when the master of the house had his wife and concubines rigidly secluded, and any cohabitation after drinking could safely be considered the cause of the pregnancy which followed. Comparisons, too, could be made between these and the earlier and later children of the concubine, and with the offspring of other concubines. It would be easy to exclude any concurrant sickness, but not a degenerative predisposition on the part of one or both of the parents. Such favorable

conditions made possible the observations recorded in ancient literature,

F. W. Lippich accumulated from this source data of ninety-seven children, the product of such conceptions; of whom only fourteen were free from defects, while the other eighty-three showed various illnesses or signs of degeneration. Many others, physicians of unknown reputation, but capable of doing good research work, have also collected data.

Bourneville found, that of two thousand five hundred and fifty-four idiotic and epileptic children of Bicêtre, two hundred thirty-five or nine and two-tenths per cent were certainly conceived during intoxication, and eighty-six or three and three-tenths per cent were apparently so conceived.

Sullivan, physician of the Pentonville Prison in Liverpool, found, that in seven cases, where the mother was intoxicated at the time she conceived, the fruit of the conception was either still-born or died soon after; while later born children lived, altho the first-born of drinking women have usually the greatest relative length of life, as Sullivan was able to demonstrate among one hundred such women of his patients. He excluded cases of alcoholism with syphilis or any nervous taint, and tho accepting the statements of his patients, we can be sure that he carefully corroborated them, whenever it was possible.

In France, L. Frank informs us, a good many inferior children and most of the still-born and illegitimate, appear nine months after seasons of drinking; as the carnivals in the cities, and the church fairs in the country.

Naecke writes, that in some countries, the congenital epileptics or imbeciles are usually conceived at the time of new wine. It is held as a rule in the wine countries, that a poor school year comes seven years after a good wine year.

Among eight thousand one hundred and ninety-six imbecile children of Switzerland, Bezzola found, that the curve showing the number of conceptions was highest during the festival seasons of the year, times when the conception-curve of normal children was lowest.

Of eighty-six imbeciles of the canton of Graubuenden,

half were conceived within a period of fourteen weeks, which proved to be a season of drinking, while the other half were distributed evenly over the other thirty-eight weeks. Hartmann found, that the conception-curve of two hundred fourteen Swiss criminals agreed very closely with that of the imbeciles.

Many degenerates are constantly found among the intoxicated, and alcohol excites them sexually, and does so more quickly than it does the normal; but that a disproportionately large number are intoxicated during seasons of drinking, or that alcohol excites them sexually more than the normal, or develops in the former stronger sexual powers than in the latter, is not proven. The attempts at criminal assault and the acts of immorality of the degenerate, after the use of alcohol, are only signs of lessened control.

According to Naecke, alcohol soon after ingestion appears in the blood, the other fluids of the body including the semen, and in all tissues. Nicloux and Renaut attest that the testicle and ovary suffer very much under the action of alcohol, which, after ingestion is found especially in the parenchyma of the testicle and in the seminal fluid, and in the same proportion as in the blood. It is also found in the prostate gland in two-thirds that amount and in the ovary in the female in three-fifths the amount. In research work, instituted by Nicloux and Renaut upon four men, it was found that alcohol very quickly appeared in the semen in the same proportion as in the blood.

Naecke questions whether all spermatozoa absorb an equal amount of the alcohol, but this idea has slight foundation. Myer and Overton affirm that the potency of a narcotic depends upon its solubility by the limiting membrane of the cell. Now it is plausible to believe that cells of the same kind, in the same individual, should not differ essentially in organization. Records now extant, of research work upon unicellular organisms show that the action of alcohol varies with the kind used, with the strength of its solution and with the species alcoholized, but fail to show any difference in intensity of action, with the same alochol, in the same concentration, upon different individual cells of a single species.

Gunther found, that the spermatozoa of dogs, in a one-percent solution of ethyl alcohol, were damaged at the end of two hours, action ceased after eighty minutes; with propyl and amyl alcohol in the same strength, after eighteen and eleven minutes respectively. Human spermatozoa withstood its action longer. The ciliated epithelium of the frog still longer. There was no essential difference in the time when activity ceased, among individual cells of the same kind, and with the same kind, and strength of solution, or it would have been noted.

All of this leaves no ground for believing, that any spermatoza could escape the alcoholic action, because of disproportionate saturation during intoxication.

Naecke is of the opinion that when intoxication occurs very quickly after the ingestion of a small amount of alcohol, it can hardly be thot that very much of the poison has reached the spermatic fluid. This view is untenable, since it does not at all depend upon the intoxication, but upon the quantity taken. Nicloux and Renaut have found that the greater the quantity, the more reaches the semen and the stronger the action on the spermatozoa. In the female, the ovary, the ovum and the secretions of the Fallopian tubes, are effected in the same way.

Finally, in the higher orders of life, illness or severe injury, acute poisoning, extreme bodily fatigue from hard mental or physical labor, all depress or suspend the sexual appetite.

It is almost certain that in all these cases, poisons circulate in the blood, that have a harmful influence upon the testicle and ovary and their products; and nature wisely orders that the same cause shall effect the sexual desire. Sexual activity should always be the expression of the highest condition of health and vigor, and only among the human species is the choice given of inciting himself to the act, thru mental suggestion at inappropriate times, or of refraining from so doing.

Herein lies the chief factor in the degeneration of man. Higher development, better breeding, should be the watch-word of the physician. He must devise ways and means of preventing the sick and degenerate from propogating, as well as study and make generally known, the factors that unfavorably influence the offspring of normal people.

Alcohol and other poisons are among these factors, and the whole subject presents a wide remunerative field for research, which is of enormous importance.

SOME MEDICO-LEGAL ASPECTS OF INEBRIETY

BY G. ALFRED LAWRENCE, L L. B., PH. D., M. D. INSTRUCTOR IN DISEASES OF THE MIND AND NERVOUS SYSTEM, NEW YORK POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL, ETC.

THE subject of inebriety or alcoholic addiction is one that is assuming greater and greater importance as the conditions of our advancement in civilization become more complex and thus produce ever-increasing demands upon the individual members of the social system. Even now, at the present session of the New York State Legislature, a bill has been introduced to create a commission to study the treatment of inebriates and persons addicted to the excessive use of narcotics and their relation to the commission of crime and, furthermore, as to the expediency of establishing a State Institution for the care of such persons. It is to be hoped that such a commission will be the means of establishing a suitable colony for inebriates under the supervision of skilled inebriatists (if we may use such a term to distinguish a physician especially trained in the care and treatment of inebriates), and along the broad scientific lines now so successfully carried out by the State at the Craig Colony for Epileptics at Sonyea, Livingston Co., New York, after sixteen years of existence. The unfortunate one who, by heredity or limited physical or mental endurance or from unusual demands upon him, physically or mentally, finds that by alcoholic stimulation the jaded and overtired body and mind can be whipped up to accomplish the task set before him, too soon in the great majority of cases, the ever-increasing amount of stimulation required renders him a helpless slave to the habit, broken in health, an economic burden to his family or the State and in many cases an offender of the law.

Of the many effects of inebriety, Mendel (1907) estimates that 15 per cent of insanity is caused by alcoholism directly, to say nothing of a still greater number who, from the contraction of venereal and other diseases, the practice of various excesses, and from hereditary tenden-

cies, finally become insane but in which alcoholism is but a secondary or contributing cause.

The New York State Lunacy Commission from 1888 to 1902, in their admissions to the various state hospitals for the insane, found that nine per cent of all cases thus admitted were directly due to alcoholism. In France, owing to the very general use of absinthe in addition to other alcoholic liquors, 13.6 per cent of all admissions to public insane asylums are due more or less exclusively to alcoholism and have thus become economic burdens upon the State. Nearly one half of this total number or 6.8 per cent were absinthe drinkers. In the *French Official Journal*, for 1907, Mr. Mirman, director of the Department of Public Assistance and Hygiene, determined from statistics collected for the ten years, 1897 to 1907, that there was an increase of 57 per cent in the number of insane in 36 departments of France during the past decade, thus showing a proportionate increase in inebriety. Again, in the dread disease epilepsy occurring in one of every three hundred persons, it is estimated that 14 per cent of the cases are directly due to alcoholism, and we find it the direct or contributing cause in many other diseases, notably of the nervous system, the heart, kidneys, and liver. Furthermore, Sachs (1900) estimates that fully 50 per cent of all crimes committed in Germany are due to alcoholic excesses, and, no doubt, the percentage is as high or higher in England and America, according to Hammond (1904). It is notorious that most prostitutes are alcoholic, which makes them still greater factors in the spread of disease and the perpetration of crime.

Many crimes which become of medico-legal importance are committed when the degree of intoxication is such that the inebriate is incapable of appreciating the nature and quality of his act, his reason being defective to that extent. Finally, in the causation of suicide, alcoholism plays an important rôle. During the year 1906, the total number of suicides in Prussia was 7298, of which 12.9 per cent were directly due to alcohlism, and of these 11.6 per cent were men and 1.3 per cent women.

Inebriety, according to Crothers (1888), has been recognized as a disease ever since the second century of the

Christian Era, when Vulpian, a Roman jurist, urged the necessity of treating inebriates as sick and diseased and with special surroundings and by special means. In 1747, Cadillac, of France, urged that the State provide special hospitals for dipsomaniacs. Since then Dr. Rush, of Philadelphia, in 1790; Dr. Cabanis, of Paris, in 1802; Professor Plateur, of Leipzig, in 1809; Salvator, of Moscow, in 1817; Esquirol, of France, in 1818; Crammer, of Berlin, in 1822, all in their time were active advocates of the treatment of inebriety in suitable inebriate asylums. In 1830 the Connecticut Medical Society appointed a committee to report on the need of an asylum for the medical treatment of inebriates. In the same year, Dr. Woodward, of the Worcester Insane Asylum, Massachusetts, made a plea for special hospitals for inebriates and that inebriety be treated as a disease. In 1844 the English Lunacy Commission urged that inebriates be regarded as insane and sent to asylums for special treatment. In 1864 the first inebriate asylum was opened for patients at Binghampton, New York, but from lack of proper public support and political dissensions a few years later, it was changed into an insane asylum. Since then, however, numerous asylums for the treatment of inebriates have been opened in the United States, various countries of Europe, Australia and New Zealand and are doing important work in the solution of the proper care of this large class of cases.

For the purposes of this article, the term inebriety is used synonymously with drunkenness or habitual intoxication in which a sufficient quantity of alcoholic beverage—which may be very small or extremely large—has been imbibed to produce a psychosis. This, therefore, excludes all those who may drink even large quantities of liquor so long as the habit does not cause them to depart from their normal psychical state. In classifying the alcoholic psychoses we may have: (1) acute alcoholic psychosis; (2) subacute alcoholic psychosis; (3) chronic alcoholic psychosis, and (4) dipsomania.

(1) Taking up the first division more in detail, the acute alcoholic psychosis may be an exacerbation of a chronic alcoholic psychosis in which, at intervals, the chronic

alcoholic may have an acute alcoholic condition and later, after a longer or shorter period, lapse into the chronic stage again. Futhermore, it may originate from the use of alcoholic stimulation in a debilitating somatic disease, especially where a considerable hereditary taint is present; also in epileptics, and after injuries to the cranium. The quantity imbibed, individual suspectibility, and environment are also important factors. There are several varieties of this acute alcoholic pyschosis that should be noted: (*a*) apoplectic type, with unconsciousness; symptoms of general paralysis, collapse, and death; (*b*) convulsive type generating an epileptic seizure and maniacal state which may increase to raving (*mania acutissima ebriorum*) with manifold frightful hallucinations, often leading to violent assaults or destruction of anything within reach of the maniac; (*c*) twilight state or alcoholic trance in which the inebriate appears calm, answers questions of an ordinary character without delay and correctly and to the unskilled observer appears normal. These cases are of especial medico-legal interest as they may, while in this state, do peculiar things, utter indecent expressions, commit indecent exposures, various crimes, and attempt suicide. On the other hand, they may remain in a state of stupor and become the victims of crime. Such an acute state of alcoholic pyschosis may last but for a few minutes or continue for a day and usually passes off in a deep sleep.

(2) Of the subacute alcoholic psychosis, (*a*) delirium tremens, (*b*) alcoholic melancholia, and (*c*) alcoholic paranoia are the most important varieties. Delirium tremens may run the ordinary course with gastric disturbances, anxiety, trembling, insomnia, delusions with sense deceptions, frightful hallucinations, at times leading up to the highest degree of frenzy, epileptic spasms, mussitating deliria, and finally recovery in the course of a few days or weeks, or a chronic alcoholic state develops lasting for weeks with repeated relapses, or death may terminate the case. As variations we may have an abortive form of delirium tremens with hallucinations, but the patient may seem very intelligent and perform his accustomed labor, although it may be interrupted. Furthermore, we may have a chronic form

in which the delirium drags along for many weeks with repeated relapses; also a febrile form with temperature as high as 103° F.; or an epileptic form in which epileptic seizures may occur frequently during the course of the disease. This latter form is not to be confused, however, with epileptics who contract the alcoholic habit and develop delirium tremens from the latter cause. The amnesia will determine this point. Finally, we may have the polyneuritic type or Korsakoff's disease of alcoholic origin, in which the symptom-complex of multiple neuritis, gastric disturbances, disorientation as to time and place, striking disturbances of memory, hallucinations, delusions, and illusions are the prominent symptoms. Sometimes a stuporous state supervenes instead of the delirium. In this type, the disease is usually protracted, often a year or longer, with final recovery in most cases; in other cases a varying grade of alcoholic dementia develops, or a paranoid symptom-complex, and in some cases death terminates the case either from exhaustion or suicide (the latter in from 5 to 10 per cent of the cases).

Alcoholic melancholia may arise after acute excesses on the basis of chronic alcoholism, in which the symptoms are a melancholic depressed state with self accusations, depressive delusions and hallucinations and symptoms of stupor which usually pass away in a few weeks.

Alcoholic hallucinatory paranoia (Wernicke's Acute Hallucinosis of the Drinker) is still another type of the subacute alcoholic psychosis, in which there may be ideas of detraction often combined with megalomania; vivid auditory hallucinations are especially prevalent, the contents of which may be severe injuries, words of abuse, and threats of severe punishment. These delusions develop especially in two directions: either in unwarranted jealousy (that wife is unfaithful, etc.) or religious delusions (called by God to do certain things). The course of this type is sometimes very stormy, with hallucinations of all the senses and violent emotions of apprehension, sometimes terminating suddenly in from one to four weeks; or it may continue for from six weeks to several months, while a small proportion of the cases go on to incurable chronic paranoia.

(3) Chronic alcoholic psychosis comprises those cases gathered from the first two groups that become chronic in character, and many others who, after years of constant drinking, develop mental weakness, lack of energy, limitation of judgment, weakened memory, disturbances of moral feelings and indifference to their own interests, calling, or friends. They become less scrupulous in their transactions and simply exist for the gratification of the passions, engage in immoral acts—begging, stealing, deceptions, forging checks, etc. These chronic cases may develop either the acute or subacute psychosis, previously described, in the course of their disease, and the final result may be: (*a*) improvement under suitable treatment and with proper environment with tendencies to relapse; (*b*) incurable mental disease, as alcoholic dementia or paranoia, and (*c*) death from organic changes which alcohol has provoked (heart, kidney, hepatic diseases, etc.), or by suicide.

(4) Dipsomania or periodical manical outbreaks, accompanied by immoderate thirst for alcoholic beverages, is usually found in inheritors, imbeciles with small psychical powers of resistance, especially when assuming new burdens; cases of periodic mania of alcoholic habits, maniacal phase of maniac depressive or circular insanity, of which the depressive state is not very prominent; periodic melancholia or hypochondria in which stimulation is resorted to to relieve the depression; also periodic nervous diseases, on the basis of hysteria with heightened appetite for alcohol and total aversion to nourishment, of epileptic nature and may seem periodically like an epileptic dream-state. In the intervals there may be an absolute aversion to alcohol. Some of these cases develop delirium tremens, and others pass into a condition of chronic alcoholism.

From the above classification and symptomatology, it will be seen that there are many medico-legal complications that may result in the case of the inebriate and requiring the most careful search into the history, the physical condition and mental state of the individual prior, during and subsequent to the act; the quantity and quality of alcoholic stimulation imbibed, and accurate and complete knowledge of all the facts and circumstances leading up to, during and

following the act, before a correct opinion can be given as to the responsibility of the individual. In addition to all this, we must take into consideration the attitude of the law regarding an alcoholic and his acts. Inebriety, in itself, is not considered a punishable offence against the State, but when the inebriate violates the rights of others or commits offences against the public, he will be held accountable for the same. The common law, according to Bouvier (1897), is not disposed to afford any great amount of relief, either in criminal or civil cases, from the immediate effects of alcohol, and it has not considered mere drunkenness *alone* as a sufficient reason for invalidating any act.

In England, drunkenness has never been admitted in extenuation for any offences committed under its immediate influence; and centuries ago (end of 16th Century), the famous Lord Coke said: "A drunkard who is *voluntarius daemon* hath no privilege thereby; whatever ill or hurt he doth, his drunkenness doth aggravate it." Occasionally, however, lawyers have shown a disposition to distinguish between the guilt of one who commits an offence unconsciously, in consequence of drunkenness, and that of one who is actuated by malice aforethought and acts deliberately and coolly. Later, a case has held that drunkenness, by rendering the party more excitable under provocation, might be taken into consideration in determining the sufficiency of the provocation (7 C. and P. 817). In a later case it was declared that there might exist a state of drunkenness, which takes away the power of forming any specific intention (4 Cox. Cr. Cas. 55).

In the United States courts have gone still further, and it has been held that where murder was defined as wilful, deliberate, malicious and premeditated killing, that the existence of those attributes is not compatible with drunkenness (13 Ala. N. S. 413). Also, that when the state of intoxication is so great as to render him unable to form a wilful, deliberate, and premeditated design to kill or of judging his acts and their legitimate consequences, then it reduces what would otherwise be murder in the *first* degree to murder in the *second* degree (29 Cal. 678). When one who intends to kill another, however, becomes volun-

tarily intoxicated for the purpose of carrying out the intention, the intoxication will have no effect upon the act (36 Pac. Rep. 770). Furthermore, if one person gets another drunk and persuades him to commit a crime, the *former* is responsible (91 Ga. 740). In another case (88 Ala. 100) it was held that intoxication does not excuse crime, but may show an *absence of malice*; but the burden of proof is on the defendant to show intoxication to such an extent as to render him incapable of malice.

In the matter of robbery, it has been held that if the act was committed while the person was in such a drunken state as not to know what he was doing, he will not be deemed to have taken the property with a felonious intent (92 Ky. 522). In a case where injury of the head had been followed by occasional paroxysms of insanity, in one of which the prisoner killed his wife, it appeared that he had just been drinking, and that intoxication had sometimes brought on the paroxysms, though they were not always preceded by drinking. The court ruled that if the mental disturbance was produced by intoxication, it was not a valid defense; and, accordingly, the prisoner was convicted and executed. The principle adopted here was that, if a person voluntarily deprived himself of reason, he can claim no exemption from the ordinary consequences of crime (Ray, Med. Jur. 574).

Delrium tremens is classified as a form of insanity in which the party is not responsible for his acts, in Wharton and Stille's Medical Jurisprudence (1905). Mania a pótû (delirium tremens) is given as an excuse for crime, although drunkenness is not (100 N. C. 457). Such a decision, from a medical standpoint, is irreconcilable with the fact that mania a pótû is but a form of drunkenness. Another series of cases makes a distinction that, where dipsomania effects the intellect and not merely the will, it may be a defense (105 Cal. 486). Still another distinction is made that where a person, in regard to a particular act, though knowing right from wrong, has lost his power to discriminate, in consequence of mental disease, he will be exempt from his crime (155 N. C. 807). Dipsomania, in the present state of judicial opinion, would hardly be considered a valid

defense in a capital case, though there have been decisions which have allowed it, holding the question whether there is such a disease and whether the act was committed under its influence to be questions of fact for the jury (40 Conn. 136). The law does, however, recognize two kinds of *inculpable* drunkenness: one produced by the "unskillfulness of the physician," and that produced by the "contrivance of enemies," (Russ, Cr. 8). To these may, perhaps, be added one in which the party drinks in more liquor than he does habitually and without becoming intoxicated, but which exerts an unusually potent effect upon the brain, in consequence of certain pathological conditions (5 Gray. 86). In the case of Arson, the distinction is made, and it has been held that inebriety is no defense where it appears that the act of setting on fire was wilfully done, it being of no consequence what the intention was (2 Edin. Sel. Cas. 80). In negotiable instruments, drunkenness is no defense as against an innocent purchaser for valin (91 Pa. 17). The inebriate's contracts are not void, but voidable only (8 Am. Rep. 246). When deprived of all consciousness, strong presumption of fraud is raised, and on this latter ground courts may interfere (1 Ves. 19).

Marriage is a contract, and if entered into by an inebriate lacking contractional capacity, is voidable but may be subsequently ratified upon returning to a condition of sobriety and thus make the contract binding. This statement also holds good in the case of that form of inebriety designated as dipsomania, where the contract is entered into during the period of alcoholic mania, but not so if entered into during the intervals.

Chronic inebriety, if shown to have affected the mind of the contracting party to the extent thet he could not comprehend the nature of his act, also makes his marraige contract voidable. In the case of divorce, the laws of different states vary. In New York State, inebriety is not recognized as a ground for divorce, while in some states habitual drunkenness is so recognized (130 Ill. Rep. 230). In many states, legal separation may be obtained on the ground of habitual drunkenness, especially if it can be shown that the life, limb, body, or health of the other party is endangered.

Adultery, rape, or other sexual acts committed by the inebriate, owing to delusions of a libidinous nature and uncontrollable impulses, are, as a rule, not valid grounds for divorce, but would be if it could be shown that there was no relation between the acts complained of and the delusions. In an action for breach of promise to marry, inebriety will constitute a valid defense if it can be shown that the contracting party did not know the nature and quality of his act, and such a contract will be voidable unless subsequently ratified after becoming sober. It has been held, however, that evidence that the plaintiff drank intoxicating liquors to excess, was not admissible as a defense (1 Abb. App. Dec. 282). Whether it will constitute a defense for the party afflicted, is a question of much difficulty unless it can be clearly shown, as stated above, that at the time of making such an executory contract the afflicted party did not know the nature and quality of his act, and if this latter is proved; it will not do more than make the contract voidable. If such contract, however, is obtained by fraud, by making the party purposely drunk, the transaction will be absolutely void, no contract having been entered into. If the defendant in such action did not know of the inebriety of the plaintiff at the time of making the promise, such a plea would be a complete defense, especially in the case of dipsomania or chronic inebriety. If inebriety results in impotence, such a state, whether known or unknown to the parties, makes the promise voidable.

In a state like New Jersey, where a statute makes the marriage of an impotent person void, such a promise is absolutely void (41 N. J. L., 13). In the case of wills, if the testator is unconscious of the nature of his acts or incapable of resisting the influence of others, it avoids the will (3 D. R. Pa., 534).

In Torts, drunkenness is no defense in mitigation of damages (68 Ga. 612).

Courts of Equity decline to interfere in favor of parties pleading intoxication in performance of some civil act, but have not gone to the length of enforcing agreements against such parties (57 N. W. Rep. 478). Insurance policies are special forms of contracts and in life insurance policies,

if inebriety is proved as a fact, and the party at the time of filling in the application states he is temperate, such established fact will usually avoid the policy; although a jury has even gone to the extreme of holding that a person may have an attack of delirium tremens and yet be of temperate habits (15 Otto, 350). Suicide, in most life and accident policies, is considered a valid defense against the payment of the claim (190 U. S. 121).

In the case of dipsomania, the party applying for a policy may not know that this is a form of insanity, and if he states merely as his opinion that he is temperate, such will not avoid the policy; but if he states it as a fact, it will avoid the policy (9 App. Cas. 686).

In any case of doubt, however, the question of habits must go to the jury (120 N. Y., 237), as inebriety is regarded as a habit and not a disease in the law on insurance.

It will thus be seen that where the condition of inebriety exists to the extent that the patient may commit offenses against the law, become a victim of designing individuals, unable to conserve his estate, or may become an economic burden upon the State or his family, he should be placed in either a private or public institution for the care and proper treatment of inebriety, voluntarily, if possible, but if necessary under legal commitment. New York State recognizes no legal commitment of an inebriate, excepting on the basis of actual insanity, and then only for the period covering the active manifestations of such insanity, so that the few who are actually legally committed as insane persons, are too soon released in a condition in which they almost invariably relapse into their former state. Fortunately for many of these cases, the adjoining state of Connecticut has wisely enacted laws admitting of either the voluntary commitment of the case by the patient himself or a more binding legal commitment upon the petition of a relative or friend, regardless of the wishes of the patient. In the former case, the patient signs an application for care and treatment in a licensed sanitarium. Should the patient subsequently desire to leave before he is in a suitable condition, he must give three days' notice to the physician in charge of the institution. During these three days a relative

or friend can make application to have the patient legally committed, against the latter's will, if necessary. The nearest District Court receives the petition, and the judge appoints two examining physicians who examine the patient, and if they advise his further retention, a day is set for the hearing of the case when the patient is brought to court (or his presence may be waived at the discretion of the judge), and if the judge deems it for the best interest of the patient, he grants the petition committing the patient for one year, which can be renewed for another year if necessary. Such a proceeding can be instituted at once by a friend, or relative, without going through the formality of a voluntary commitment by the patient, and this latter is the usual procedure, as few patients are willing to give up the habit of their own free will and accord. Such a patient may be discharged before the completion of the year if fully recovered or the petitioner desires the removal to some other place. This gives the physician-in-charge of such an institution full legal authority to use the necessary legal restraint, to control and prevent the obtaining of alcoholic liquors from without, and direct the habits of the patient; see that he observes regular hours, has suitable diet, proper rest, exercise, recreation, occupation and sleep, together with hydro-therapeutic, electrical or medicinal treatment, according to the requirements of the individual case. Under such treatment as carried out at the present time, from 30 to 50 per cent of inebriates are cured. A still greater percentage of the earlier cases would be absolutely cured and upon their discharge become useful citizens for the remaining years of their life, could we but have an inebriate colony established along similar lines (but especially adapted for inebriates) as that now so successfully carried out for epileptics for the past 46 years at Bielefeld, Germany, where over 2000 cases of epilepsy are under constant supervision; and in the State of New York at Sonyea, Livingston Co., and known as the Craig Colony for Epileptics, which has been in successful operation for 16 years, and now cares for some thousand patients on a tract of about 2000 acres, on which are situated 76 separate buildings. Such a colony for inebriates should be under State supervision and consist, preferably, of several

thousand acres of well-drained farm and woodland in a healthy and accessible location. A detached cottage plan should be adopted with necessary administration buildings, hospital, amusement hall, churches, work shops, dormitories, and numerous detached cottages to accommodate not exceeding 30 persons each. A suitable laboratory for scientific research in the field of inebriety would be of value; also a library for the use of the patients, and staff. Athletic grounds and a gymnasium should be added.

The ground not used for buildings could be cultivated as farm land for vegetable gardens, orchards, poultry and stock yards, and the forest land could be utilized to supply necessary wood. All the work about the colony so far as possible, as assistant nurses; clerks, farm helpers, gardeners, etc., could be done by the inmates under the direction of a comparatively small number of paid employes.

It is needless to say that such a colony should be under the direct charge of a medical superintendent with a sufficiently large medical staff, all of whom should be trained inebriatists or specialists in inebriety, so that each patient might receive individual treatment and be carefully classified. Such a colony could be partially self-supporting, as has been demonstrated at the Craig Colony for Epileptics, where, in 1906, the produce from the farm and garden and their numerous industries reached the total value of $42,000.

Finally, the inebriate should be legally committed to such a colony along the lines that have been in active and successful operation in the State of Connecticut for so many years.

The establishment of such colonies upon broad scientific lines, would go far towards solving this serious problem which is becoming of ever-increasing importance, not only from the medico-legal standpoint, but from the sociological and economic standpoint as well. A few statistics from the recent work of Cullen (1907) will illustrate this latter point. The British Nation spends annually in drink £179,000,000. In the United States, in 1905, $1,325,439,074 was spent for the same purpose, and it was estimated that 1,500,000 men and women were daily incapacitated for work, making a total cost of over $3,000,000,000 annually for and from the direct effects of alcohol. Furthermore, it is estimated that

51 per cent of all paupers in almshouses came there through drink, and Warden Roberts, of the New York Almshouse, on Blackwell's Island, estimates that 90 per cent of the 2593 inmates are there through drink. Of the 24,300 patients in Bellevue Hospital in 1900, Dr. Alexander Lambert (1904) found that over 25 per cent went through the alcoholic ward. It is furthermore estimated that 10 per cent of all mortality and 20 per cent of all disease is due to alcoholism.

In conclusion, it would seem that as we have experts for all other diseases, alienists for mental disease and neurologists for nervous disease for example, so should we have expert "inebrietists," or specialists on the subject of inebriety to cope successfully with this broad and far-reaching problem.

FIVE TYPES OF DRUNKARDS AND THEIR TREATMENT

BY TOM A. WILLIAMS, M.B., C.M., EDIN., WASHINGTON, D. C.,
MEM. CORRES. SOC. DE NEUROL. DE PARIS,
NEUROLOGIST TO THE EPIPHANY FREE
DISPENSARY.

THE craving for drugs admittedly arises from perturbations of the nervous system, but it is not enough realized that these are of many kinds. This cannot be wondered at since there is so little realization of the nature and genesis of psycho-neuroses in general.

Therapeutic power comes only through diagnostic precision; and a wider knowledge is needed of the fact that this precision is now quite attainable, thanks to the recent labours of neurologists.

We can distinguish at least three types of what was once vaguely called psycho-neurosis. These are hysteria, psychasthenia and *neurasthenia*.

The last is of two kinds: (1) a congenital make-up in which the fatigue period of the neurones is so quickly reached that a person is incapable of low average work; (2) The increased fatiguability which occurs when normal neurones are perturbed by intoxicants from without or within. In this state, may occur also psychological perturbations, for mental operations depend upon a feeble neuronal equilibrium which the intoxicant may disturb. But psychic symptoms are not a feature of neurasthenia; they are a complication. Its treatment is a commonplace of medical art, and need not detain us now.

Hysteria compromises only those symptoms producible by suggestion, pithiatism. Suggestibility may be increased during neuronal intoxications, but is not necessarily so, and a suggestion psychosis often occurs entirely irrespective of mechanical or chemical influences. It occurs then in individuals of strictly normal nervous system; and is merely a result of faulty psychic environment, sometimes in conjunction with hereditary *predisposition*, a mental slackness, favoring suggestibility.

Chronic vaso-motor and trophic perturbations, when they are not psycho-genetic, and when they occur in hysterics result from intercurrent lower neurone disease, congenital or acquired neurosis in the true sense.

The malingerers who simulate these are often hysterics as well, but not necessarily so, and hysterics are only sometimes mythomaniacs, whose dearest desire is to mystify and cheat their neighbors. Much error has arisen from confounding these two distinct psychological states, which, however, frequently complicate one another; for hysteria and mythomania are mere exaggerations and perpetuations of tendencies which exist in normal childhood.

Now a frequent cause of hysterizability is the early stages of dementia precox. Moreover, it is sometimes not easy in practice to distinguish from a mere psychogenic constitution or perturbation which may be a hysteria, the more grave somatic disorder which leads to the progressive dementia of adolescence. In both, the direction of the impulsions is guided by an idea; in both, indifference to the usual interests is apparent, and both are apt to bungle at their work; in both, negativism may occur; and hysterical tics may be mistaken for the stereotypes of catatonia; and hysterical fugues can hardly be distinguished from those of the hebephrenic; and hysterical laughter and tears, to a superficial observer are as inopposite as those of the future dement. Furthermore, the hysterical state may secondarily induce somatic perturbations, anorexia, constipation, amenorrhea; and besides fixed ideas of bodily illness are very common in hysterics, and may, when visceral, be easily confused with the cenesthropathies which are so commonly revealed by a careful inquiry in precocious dementia. Again, the trance-like states of the catatonic are sometimes simulated by hysterical somnambulism.

But there is a criterion in psycho-analysis, for the causal idea at the root of a hysterical syndrome can generally be discovered in proportion to diagnostic skill. The pithiatism of precocious dementia is on the contrary merely an epiphenomenon; and the temporary removal of the pithiatic symptoms by psychotherapy does not cure the patient or the rest of his syndrome. Whereas the removal

of the causal idea of a hysteria quickly restores the patient to mental and physical health; although of course a hysterical tendency can only be removed by re-education, which may be sometimes impractical or impossible.

But it is impossible to treat one who has become a drunkard by suggestion, so that he becomes sober by persuasion while still remaining a potential hysteric. It is in this way, that many drink cures act, for most people are very amenable to suggestion; indeed, as I was compelled to declare at the Brussels neurological society, few of us are not potential hysterics given the determining conditions, because, psychologically, hysteria is nothing more or less than a tendency to uncritical acquiescence in an idea and its psycho-motor consequences.

I must not enlarge upon the treatment of pithiatism; for it is a whole chapter of therapeutics. But even the degenerate and insane is to a certain degree amenable to the more intense stimuli; and these we can legitimately include in our conception of psychotherapy. Indeed, I know of no persons who hold more obstinately early-inculcated ideas than some high grade imbeciles or arrested dements. So that for all practical purposes, the treatment of the suggestibility which may lead to alcoholism is the same whether it concerns constitutional or acquired hysteria, or whether it is due to congenital mental degeneracy or the mental degeneration which we call dementia precox.

The term psychasthenia denotes a largely recognized clinical entity representing at least a definite mode of reaction to environment manifested by certain individuals. It is not, as many erroneously conceived it, a neurasthenia with conspicuous psychic symptoms. The essential symptoms of neurasthenia are generally absent in the chronic psychasthenic, who however, may become as neurasthenic as any other individual; and again, a neurasthenic state may foster psychasthenic complications. Some of the patients placed in this class perhaps really belong to the type of vesania to be later considered.

The most *constant* though not necessarily the most prominent symptoms of the psychasthenic are the feeling of personal inadequacy, unreasonable fear, a sentiment

of unusualness even to the point of unreality of self or surroundings. The most *prominent* symptoms are apt to be what Janet has called the forced agitations. The most conspicuous of these are the tics and dromomaniacs, for they cannot but arrest the attention of the patient's associates. But as they are only symptomatic of a general state, the physician's attention should not be confined to them, but must go to their root, which he will find in the emotional pain which these patients feel. The fugues and tics are only a means whereby they seek to stimulate away their suffering. A most dramatic means of determinating her emotional depression was adopted by a psychasthenic young woman of Janet's, who had to pour boiling water upon her feet and hands in order to escape from the moral pain of her crises.

To escape from the demon within, alcohol is a frequent expedient. The treatment of their alcoholism must consist of teaching these patients the true nature of their psychasthenic state, and of showing them how to avoid its exascerbations, which usually ensue upon bodily or mental excesses and bad hygiene. Of course, the intellectual forced-agitations of such people must not be indulged; their ruminations and reveries must be prevented by definite and clear occupation, alternated with short rests, and their monomanias, doubts and obsessions must not be suffered to dominate their mental life. But although they must not be ignored, they should not be fought like the ideas of the hysteric. After being first faced and settled, they should be switched away from, and as completely as possible substituted by intellectual interests of the greatest possible dynamism. When an impulsive obsession takes the form of a monomania for intoxicants, the aboulia of the patient may require the reinforcement of constant tutelage or of segregation. But when the desire for intoxicants is merely the outcome of the general misery of phychic insufficiency for the sake of the relief it gives, the only hope, unless the case is curable, is a re-education of the point of view and of the patient's power to withstand his miserable state without recourse to what he knows to be so injurious. The treatment is most delicate; for no one feels his failure more

than does the patient himself, and the self-reproach of this by no means adds to his fortitude for future struggles. Hence, such patients should be exhorted rather than blamed, and encouraged rather than scolded.

The sufferers from this malady are perhaps the most important and numerous of the difficult cases of addiction; but the subject is too large and protean to permit me to do more than indicate the few features upon which I have touched, as I last June considered it in greater detail.

Besides the psychoneuroses proper, a fertile source of drug addiction is the *cyclothymic constitution*. At its extreme, this dyscrasia is known as the manic-depressive syndrome of Kraepelin; and even in this form, the initial phases of its periodic attacks may lead the patient to indulge in various excesses, of which alcoholism may be one. The expansiveness and exaltation of the maniacal phase lead to the orgy in which the patient's need for occupation and movement is reinforced by all the resources of a baccanalian revel, which varies with the culture, environment and economic resources of the victim. When in possession of a little money, even the most degraded can find boon companions upon whom to exercise the vain-gloriousness brought by alcohol.

In the early phases of depression which sometimes precede for a long period a melancholic attack, the patient suffers acutely from the consciousness of the retardation and difficulty of his psychomotor reactions, and he often resorts expressly to what he conceives to be a stimulant of his jaded faculties and for the time becomes an alcoholic.

I need not perhaps here enlarge upon these two sufficiently well-known types of periodic drinking. I wish, however, to say a few words about the oscillations of physiologic and psychologic status, the excess of which may be termed cyclothymia. Persons of this temperament suffer from constant ups and downs very often apparently independent of extraneous mental or bodily cause. Some days they feel unusually well, envisage their task so that performance seems easy, and have such a sense of comprehension of the problems of their life that anything but plain sailing seems unthinkable. Other days, on the contrary, are

characterized by problems which seem insoluble, tasks which cannot be performed, social relationships too difficult to adjust, and a general sentiment as of a situation which is too much for their powers so sadly inhibited.

Now, either of these states may lead to indulgence in narcotics. A patient of my own used to drink principally at times when he felt especially well; for he then thought he was strong enough not to exceed, and that he would be able to stop after the second glass. This, however, he was never able to do. Another patient is afflicted with an undue self-confidence and a tendency to blame others for his downfall. He too, has ups and downs; although they do not become evident except after the strain of severe work, and it is then that he takes to alcohol. It lifts from him the suffering and severe depression induced by his fatigue; but in his case, too, a feeling of well-being and self-confidence was a large factor in his continuance of the habit.

As the pathogenesis of cyclothymia can only be surmised in the present state of our knowledge, its radical treatment is still subject to investigation. I am at present essaying opotherapy in some cases where the depressive phase of the disorder has been prolonged. My efforts are purely empirical, although they are founded upon the hypothesis that cyclothymic variations may sometimes depend upon arythmia of the internal secretions; for it is quite certain that they do sometimes depend upon dysthyroidia. The problem, however, is even more complex than this, for it is unlikely that only the thyroid is at fault.

Until, therefore, we have found specific means and learnt to distinguish the nosological varieties to which they are fitted, our treatment of cyclothymia must be merely palliative and prophylactic. Both psychic and somatic measures are required. In one patient, recurrent maniacal attacks were caused by the metabolic disturbance caused by secret gluttony. And it must be remembered that bulimia frequently ushers in an attack, and indeed that is one of the ways in which may be expressed the patient's sense of inadequacy and asthenia. This longing may be instinctive or it may be due to an unconscious suggestion; for no notion is more prevalent than that the taking of food is an immediate

recuperant when fatigued. One of Janet's agorophobic psychasthenics carried this notion to such an extent that she was unable to accomplish the formidable task, to her, of crossing the Place de la Concorde without frequent recourse to relays of sandwiches of ham carried in an enormous bag, always prepared for such emergencies. For the less onerous duty of talking to her doctor, she found that bread and butter gave her enough strength; and she had a whole series of comesticles suitably graded for different occasions.

It becomes an important duty of the physician of such patients to warn them against indulgence in the bulimia they feel, which will otherwise cause a metabolic upset, and lead to an aggravation of their condition, during which desire for intoxicants is much exaggerated.

On the whole I believe that cyclothymic patients are at their best when partaking of a light diet, relatively poor in proteins and free from extractives, which are particularly injurious to them. So also are the alkaloids; and the cyclothymic are exceedingly susceptible to the caffeine group, doses of which no larger than are taken in a cup of tea or coffee may even go the length of causing angoisse. These clinical conclusions perhaps find their explanation in the experiment of Chalmers Watson upon the growth and differences in the thyroid gland of rats upon different diets. He found that the smallest growth and the greatest variant from acinous normality was produced by a diet of flesh; while the largest glands with the most perfect acini grew when the diet was oatmeal.

Of course, I should not need to mention the other precautions of hygiene in the care of these patients, except for the fact that they are so often omitted from the instructions given them by the physician. This omission is especially frequent when it is a question of psychotherapy; and is one of the dangers of the lay practice of this art.

Now, the psychic factor in these patients is of tremendous importance; for it is upon utilization of this that the physician relies to enable such patients to participate in every-day life in spite of the handicap afforded by their dyscrasia. But a wise physician, far from asking of the will-power of

his patient a futile struggle against bodily disabilities which can be removed, uses all the resources of his art to remove and prevent the recurrence of the bodily states which interfere with the functions of the neurones upon which depends the psychological efficiency of his patients. He teaches the patient about himself and how to use himself; he shows him that body and mind are one and indissoluble, and that they react one upon the other every minute of day and night. The old adage had it, "*In vino veritas.*" From the doctor's explanation, the patient can write a new adage, "*In veritate vinum moruit.*"

The fifth type of drinker is not a psychoneurotic at all. He is a perfectly normal individual who has lived in an environment where some form of narcotic is part of the natural regime of man. Such is the moderate smoker of opium among the Chinese, and such was the "three-bottle man" of the eighteenth century. Such is to-day many a mountaineer or fisherman. Of course, as experience tells us, excesses are frequent among this class; and even when this is not the case, physiology tells us of the diminished efficiency of the most moderate drinker. It is to the spread of this knowledge that we must look for the prophylactic treatment of this type.

Perhaps, in this category we may include the example of a prominent National Legislator, who tells me in all seriousness that he believes "drinking is the best thing for a man, and there is nothing for clearing the mind like a real good drunk." This opinion has been arrived at and is maintained after careful observation by a legal minded man of the world, who, however, has no scientific training.

Such an opinion is not uncommon, but I am at a loss to propose a means for dealing with views of this kind; and so for the proper socialogical treatment of this type of drinker, I must appeal to the accumulated experience and the collective wisdom of the American Society for the Scientific Study of Alcohol and other Narcotic Drugs.

TREATMENT OF INEBRIETY

BY IRWIN H. NEFF, M.D., SUPERINTENDENT OF THE FOXBOROUGH, MASS., STATE HOSPITAL.

WHAT I have to say may rightly be considered to be new applications of old theories. The problem of the care and treatment of the drunkard has been before us for many years. The increasing prevalence of this condition, the enormous yearly expenditure of money incurred in taking care of these persons, and particularly the futility of the punitive system now so universally practiced, has aroused public interest, and there is a universal demand that adequate provision be made for the proper treatment and care of these unfortunates.

The lack of uniformity of opinion in the profession regarding the nature and treatment of inebriety must serve as my excuse for bringing before you a much-discussed subject. While many physicians accept the dictum that inebriety is a disease, others accept it tenatively and frankly acknowledge that their conception of the trouble is vague and misleading. This lack of cordiality of the physician, partially justified, it is true, is in great part responsible for the interest in the cure of the disease shown by lay members. Realizing that the medical profession as a whole is seemingly disinterested, they have championed measures for the cure of alcoholism, which cures have been effected to a greater or lesser degree. Besides these well-meaning persons who are making honest attempts to do something for the suppression or amelioration of inebriety, we have the omnipresent quack, who, taking advantage of the credulity of the public, and recognizing the indifference of his natural enemy, the physician, has had a rich field in exploiting his cures for the treatment of drunkenness.

Twenty years ago disorders of the mind were understood by comparatively few physicians, and the differentiation and treatment of mental disease now so accurately defined was a mystery. The science of psychiatry is to-day well established; its development and recognition by the medical profession has resulted in much good to the public and has brought fame and honor to the physician.

This increased study given to morbid psychology has enhanced the value of the study of the neuroses, psychoneuroses and the borderland cases, and this has given us a recognized treatment which we conveniently call psycho--or mental therapeutics. Whatever application we give to this form of treatment, or however we are inclined to interpret it, we cannot but acknowledge that its legitimate use is attended with good results.

It is one of the objects of this paper to show that inebriety from a diagnostic and curative point of view belongs to the medical profession. If this were generally recognized it is believed that many questions related to drunkenness, now debatable, would be satisfactorily answered. To emphasize this I quote authoritatively: "The most important factor of all is the attempt to prevent the spread of alcoholism. Although it is supposed to be a sociological question, its ultimate solution rests largely with the medical profession. A great deal can unquestionably be done by the physician in educating the public to investigate these evils. Careful instruction should be given in schools regarding the effects of alcohol, but unfortunately much that is now given is based upon imperfect observation, and facts are so distorted that, to say the least, little good has thus far been done. The causes of inebriety are in many cases so complex and so far reaching in their consequences that a very careful analysis is desirable before this question can be successfully dealt with."

It is unnecessary to state that the physician should be the one in authority to direct and control such educational measures. The physician should take the initiative and should be the promoter of any contemplated plan for the custodial or curative treatment of these delinquents. I am pleased to report that several states have recognized the importance of this and that at least two states have legislation pending in which the medical man has taken the initiative. I do not want to be misunderstood when I maintain that the problem is a medical one, as I realize that there is no question of public interest that needs to be more thoroughly studied by the student and worker in sociological fields. We need help and lots of it, but as a

medical profession we should direct and control this work. My experience has convinced me that the greater number of non-medical workers on this subject are willing to accept the directorship of the medical profession and are anxious and ready to lend aid; likewise, I am confident that without their co-operation our work would be unsatisfactory. Parmelee writes as follows:

"The study of inebriety, like the study of every social evil, has many aspects. It has its biological and psychological as well as its ecenomic, political and other social aspects. On account of its pathological character it is frequently of interest to the neurologist and alienist. It is, therefore, evident that in the course of a single investigation made by a single individual it would not be possible to cover the whole of the subject of inebriety. In fact, no single individual could very well, in the course of an indefinite number of investigations, study all the varied aspects of inebriety, for he could not possess all of the special knowledge necessary for so complete a study."

Therefore, from both a sociological and medical point, the question is of importance and the time is certainly propitious for the inauguration of a plan which will differentiate the types of inebriates, care for them scientifically and practically, and place them under medical supervision.

Before describing the modern treatment of inebriety as practiced at the Foxborough State Hospital, I wish to prove the clinical entity of the inebriate. As we are dealing with the habitual drunkard, one in whom intoxication is frequent or constant I quote from the special report of the board of trustees submitted to the General Court of 1910: "Medical experts show that where drunkenness has become habitual, a predisposing cause is almost invariably traced in the mind or body of the patient. Drunkenness must in such cases be regarded as a disease, or as the form which certain illnesses take with certain patients. The starting point of disease is often difficult or impossible to trace. The habitual drunkard cannot be sharply distinguished from the occasional drunkard. There is an intermediate group, in whom, through the use of alcohol, a craving for that drug is developing. They drink, not to satisfy the thirst which water

satisfies, but to fill a craving for either the immediate (stimulating) or remote (narcotic) influence of the drug alcohol. Continued use of alcohol, especially in large quantities, weakens will-power and gradually destroys responsibility. In this borderland are cases who begin to show signs of abnormality—men ordinarily industrious, who let their business suffer through debauch; men ordinarily affectionate who neglect their homes for saloon or club. They are habitual drunkards in the making.

Medical specialists in inebriety classify habitual inebriates as follows:

"The first group comprises men originally of normal health of mind and body, but who, through overwork, domestic or business trouble, coupled perhaps with poor hygiene, unsanitary homes or poorly cooked and ill-chosen food, have lowered their power of resistance. With frequent indulgence in alcohol or drugs, self-control gradually has been destroyed and the patient becomes powerless to discontinue the habit. The craving for narcotics (narcomania) becomes all-absorbing. Under ordinary conditions he is unable to overcome the habit. Cases of this type studied at the Foxborough State Hospital almost invariably have displayed further symptoms of mental abnormality. This is the most curable class of pathologic inebriates.

"A second group, whom physicians often treat apart, are the 'periodic drunkards,' men ordinarily temperate or even abstinent, who at periods some weeks or even months apart are seized with a mania for drunkenness which may be continuous through a number of days. This period is followed by complete sobriety for weeks or months. This form of dipsomania, which is sometimes stimulated by wilful drunkards, is more rare than other forms of inebriety and is often classed technically as a variety of insanity.

"The last group comprises the defectives and degenerates among drunkards. Alcoholism of the patient or of his parents may in some of these cases have brought on directly or indirectly the low mental or physical condition. But it is equally true in other cases that imbecility, insanity or other forms of defectiveness or degeneracy have preceded and have been responsible for the excessive use of alcohol.

The physicians in charge of the largest houses of correction and other institutions in Massachusetts to which drunkards are sent are inclined to assert that the large majority of habitual drunkards in their care are men of less than normal mentality. To this class must be added a considerable group of men past their prime of life, in whom the habit of drinking has been intensified as the period of mental and physical decline (involution) has set in. Resistance in such cases is constantly lessened and inebriety may become chronic. The reduction of mental power characteristic in all members of this group renders cure improbable.

"There is another classification of drunkards which deserves to be considered apart. This differentiates the criminal from the non-criminal drunkard. The inebriate who offends against the law by larceny, assault or any crime other than public intoxication may be found obviously among accidental, occasional or habitual drunkards. But the type of treatment which he should receive should be different from that of other members of the foregoing groups. Even among criminal drunkards each case should be considered with reference to whether the man is criminal during periods of sobriety or only during periods of intoxication. Among women drunkards, also, distinction should be made with regard to the morality of the case during periods of sobriety and intoxication. If a man or woman is criminal or immoral only when intemperate, the vice may be but a phase of the disease of inebriety and curable with the cure of the original malady."

Perhaps these descriptions could be better emphasized by giving conclusions seemingly justified by our examination of 700 cases of inebriety which have come under our observation during the past two years:

1. Inebriety is an expression of nervous weakness or nervous instability; used in its simplest sense it could be called a psychoneurosis, many cases showing symptoms which are found in neurasthenic states and allied conditions. Addiction to alcohol is a symptom of an unstable nervous system, and the contrary view expressed by the laity is not justified by clinical observation or experience.

2. The exciting causes of inebriety are of a physical and

psychical origin. Given a neurotic subject, crises may be precipitated by any marked departure from the ordinary routine (psychical) or by any disturbance of organic nature (physical).

3. Inebriety is prone to develop as a frank case at the critical epochs of life, namely, pubescense, adolescense and involution. Developing during involution, it is generally the effort of an individual to maintain his productive power by recourse to artificial stimulation. The frequent inception of inebriety at these periods suggests an analogy to the psychoneurosis.

4. Inebriety, being an expression of neuropathy or psychopathy, may be preceded by or accompanied with a multiform nervous syndrome; thus each case is essentially different.

5. The heredity element in inebriety is considerable and is undoubtedly a powerful predisposing cause. A history of decided intemperance in the parents existed in over 40 per cent of our cases, while 15 per cent gave a history of defective ancestry; insanity, neuropathy, drug addiction or tuberculosis being present on the maternal or paternal side.

6. Approximately 5 per cent of our cases showed preexistent mental symptoms which could be differentiated. Some of these were distinct cases of psychasthenia, others were of the milder forms of maniac-depressive insanity.

We feel warranted in corroborating the statement made by others that an inherited neurotic or psychic tendency is present in a considerable number of inebriates. Many of these cases admit peculiarities during pubescense and adolescense, showing clearly neurotic or psychopathic conditions which have antedated the alcoholic manifestation. We venture to say that our future study will support these conclusions.

The treatment of inebriety requires that we should consider the inebriate a diseased person in the sense before described. Recognizing that long-continued use of alcohol is capable of causing organic disease or a much-impaired nutrition, we may, therefore, have a mental or physical syndrome. Necessarily the ordinary physical symptoms of acute alcoholism first demand our attention. If one be

free from organic disease it is often a matter of surprise to see the marked recuperative power of some of the more confirmed and protracted cases of inebriety. Institutional treatment of the physical symptoms of alcoholism does not differ markedly from that ordinarily practiced. It is generally found that during convalescense from an alcoholic debauch the patient has little or no desire for alcoholic stimulants. If a patient should demand or require stimulants, the appetite can, as a rule, be controlled with little difficulty. It must be conceded, however, that hospital treatment has its advantages in that a physiological life can be more easily enforced. Symptomatic treatment of the inebriate is often indicated, and differs in no way from that commonly used.

There is no known drug which, when taken into the system, can permanently eradicate the desire for drink in an inebriate. When considering the value of drug treatment for the cure of inebriety it is first necessary to remember that the inebriate by nature is markedly neurotic, and, therefore, suggestible; this emotionality is pronounced but unfortunately not persistent unless special measures are instituted. There can be no doubt that the drug treatment in inebriety has resulted in some happy successes. Unfortunately, we have no reliable statistical knowledge of these cures and, therefore, we are compelled to rely on individual statements. Many of these cures which have been under my observation during the past two years have had a drug treatment on one or more occasions. I have made a particular study of these patients and with a few exceptions the patients credit any benefit which may have resulted from treatment to their determination and influences which would have resulted from a change of environment and consequent new interests and enforced mental and physical hygiene. Again, when placing any value on any special method of treatment of inebriety we think it necessary to consider the types of inebriety, namely, to determine whether the patient has been a regular, irregular or periodical drinker; the length of time a patient has been abstinent, and, lastly, a comparison of the man's present mode of living with his daily habits previous to his admission to the hospital. All of the patients discharged from the

Foxborough State Hospital have been subjected to this investigation. Unfortunately, statements regarding cures of inebriety are generally lacking in these details, and until we adopt a uniform method of classification I do not believe that it will be possible to make any specific statement regarding the curability of the disease based on any method of treatment. There is no sure and rapid cure for inebriety. Remembering this, we can truthfully say that a certain percentage of cases can be permanently helped, others benefited by hospital methods, while still others are apparently incurable.

It should be understood that the matter of curability or amelioration in inebriety does not imply simple abstention from alcohol, nor does the hospital treatment include this and nothing more. It may be true that in some cases abstinence, whether voluntary or compulsory, is an incentive to the correction of the habit, but that it in itself is inadequate is clearly shown by the futility of prolonged and repeated terms of imprisonment.

Our experience has shown us that the success of hospital treatment in these cases depends upon (1) the ability of the patient to co-operate in treatment; (2) on our ability to introduce into the patient's life or mentality some tangible substitute for the desire for artificial stimulation. This substitute includes a redevelopment of the patient's self-respect and an entire readjustment of the patient to his environment. Such a result is brought about by attention to the patient's mental and physical hygiene, and necessarily depends upon educational measures inaugurated at the hospital and continued after the patient's dismissal from the institution. If aggressiveness to these principles, which may be shown by the patient, cannot be overcome, it is not probable that our treatment will meet with any great measure of success.

This seems an opportune time to say something of the promising case for hospital treatment. Our records show that, everything considered, the hopefulness of a case is in direct ratio to the duration of the habit. The susceptibility of the patient to educational measures should also be considered. The younger case, if the case be a frank and

uncomplicated one, is preferable, as in such a patient the habit is incompletely formed and the mind is freer from fixed prejudices and defects. Such a patient reacts more promptly and effectively to moral measures. All youthful cases are not desirable, as we have proven that in some of these cases the drinking habit is one of the many expressions of a moral perversion or delinquency. We have found that in some of the cases of an advanced age there has been a decided improvement after hospital treatment. It must, therefore, be remembered that the hospital may benefit some of the so-called unfavorable cases, and before eliminating these cases our purpose and custom is to give each case the closest possible scrutiny and medical analysis. It should, however, be understood that if we consent to receive these patients we should have the privilege at any time of discharging them and of refusing their return to the hospital for treatment.

Remembering that we have in inebriety a nervous weakness plus a habit, the mental treatment of the inebriate, as may be surmised, does not differ materially from the usual methods employed in the treatment of the so-called neuroses and many cases of functional nervous disease. As is well known in many neurasthenic, hysterical and obsessional cases, we have, excluding the manifestations of the nervous condition, a habit which requires correctional methods. This analogy is seen in all cases of inebriety.

The methods of treatment employed at the hospital are of the simplest nature and have proven eminently practical. The personal equation is always considered, and educational measures are consistently employed.

The object of psychotherapeutic treatment, as declared by the French school, would be to make the patient master of himself, this being accomplished by the education of the will or, more exactly, of the reason. E. W. Taylor's admirable article on "Simple Explanation and Re-Education as a Therapeutic Method" is an excellent exposition of a successful and concise way of applying psychotherapeutics. The Method clearly described is a ready means of applying mental therapeutics, and we have used it with good results in the treatment of many of our cases. As the

author states, its purpose is to draw attention to the simplest and, therefore, to the most widely available methods of psychotherapeutics and to attempt to show how such a method may be made practically useful by the physician.

We must not forget that in inebriety, as in other nervous diseases, individualization is demanded and is essential if we wish to obtain any great degree of success. Those who have had experience in the treatment of functional nervous cases of whatever type will agree with me when I say that after-treatment of these cases is all-important and that after-care should be provided. Relapses are likely to develop when least expected and should be carefully guarded against.

Inebriety is no exception to this rule. The recovery from the social and financial loss which the inebriate invariably experiences is often a matter of considerable difficulty, and notwithstanding his best efforts, continued reverses may prove a hindrance to his complete recovery.

To provide for this condition, and aid us in our policies which we have inaugurated at the hospital, we have established an out-patient department. This department is in charge of a physician, and its purposes can be defined as follows: (*a*) To assist in determining whether a prospective patient is a proper subject for the hospital; (*b*) to visit friends and relatives of patients previous to their discharge from the institution and to investigate their home surroundings, social conditions, etc.; (*c*) to aid patients to find congenial and remunerative work; (*d*) to give suitable medical after-care.

This department is now organized and is in successful operation. The anticipated benefits are already seen, and it is not only of value to the patient, but is of decided economic value to the state.

It was also early demonstrated that in many cases prolonged institutional treatment was a decided hindrance to cure as well as a hardship to the patient. With the aid of the out-patient physician it is now possible to allow patients to leave on trial at an opportune time, placing them, with their consent, in charge of the physician, who, with the patient's co-operation, continues the treatment which has

been begun at the hospital. If the surroundings of the patient are not congenial, or if he should relapse, his return to the hospital is recommended.

I have before maintained that a state hospital for the treatment of inebriety should receive and treat exclusively the case which is likely to be benefited. It should have adequate equipment for the treatment of such cases and should have facilities for segregation and individual treatment of the diverse types.

The conditions at present at the state hospital are inadequate; we believe that with better facilities the usefulness of the hospital would be considerably extended.

The trustees of the hospital have petitioned the legislature for an appropriation in order that they may establish a new hospital and colony which will take care of not only the hopeful inebriate of both sexes, but will also give custodial care to the better class of chronic or apparently incurable alcoholics. These requests are made in accordance with recommendations made by the board and incorporated in their report to the legislature.

To the question whether it is advisable to recommend institutional treatment for all cases, I would say that, in the majority of cases, the educational or re-educational measures, the basis of our treatment, can best be inaugurated at the hospital, the continuation of this treatment can be carried out away from the hospital under medical supervision and direction. No general rule can be given; as formerly stated, no two cases are similar, and for this reason individual treatment is required.

The position of the physician is clear; the case is seen by him in its incipiency, in the formative stage, at the time when treatment will be most effective; it is his privilege at this opportune time to advise and sanction treatment. If the conditions and environment are not conducive to home treatment by the physician, treatment at the hospital should be advised. It cannot be denied that there is often a reluctance on the part of persons to place themselves under treatment until one or more of the physical symptoms related to alcoholism appear, or until the habit has been of some years' duration. The individual is inclined to look

upon hospital treatment as a last resort, and unless correctly advised he is slow to take advantage of any opportunity for institutional care.

When a patient is discharged from the hospital he is placed in the charge of the out-patient physician, or, if the patient's physician should so desire, he can again come directly under his jurisdiction.

The recommendations as embodied in the special report of the board of trustees are timely and should receive personal consideration from each member of the medical profession. I anticipate that the medical profession of the state will be interested in the policies of the Foxborough State Hospital, as we realize that without their help any great measure of success is impossible. I am sure that I voice the sentiments of the board of trustees of the Foxborough State Hospital when I ask your earnest consideration and complete co-operation.

Doctor:

Try a prescription of Hydrocyanate Iron (Tilden's) in the following combinations when prescribing for Epilepsy and the Neuroses.

HYDROCYANATE IRON AND STRONTIUM BROMIDE

Hydrocyanate Iron.....1 gr.
Strontium Bromide.....4 grs.

HYDROCYANATE IRON AND HORSENETTLE

Hydrocyanate Iron.....1 gr.
Ext. Solanum Caroliniese....2 grs.

See other combinations that you will find most valuable in Hysteria, Neurasthenia, Chorea, etc.

THE TILDEN COMPANY

Manufacturing Pharmacists

NEW LEBANON, N. Y ST. LOUIS MO.

BRAIN AND IMPRINT

The Underwood Typewriter is so constructed that its type-bar imprints *at once* the character the brain directs. Its work may be done on time, and without delay or fatigue to the operator. The

UNDERWOOD STANDARD TYPEWRITER

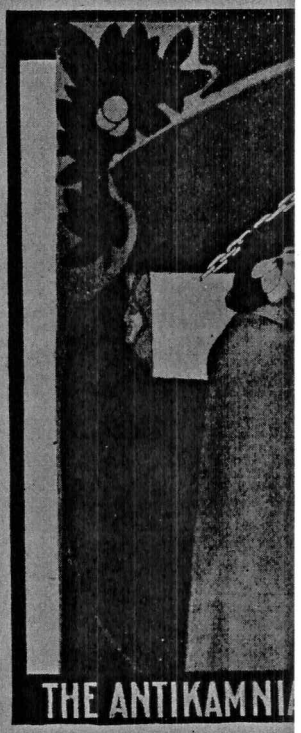
is so made and fitted—does it's work so easily and certainly that the lightest touch of the operator secures the result. There is no loss of time—no conscious effort—no waste of muscle tissue or nerve force—no worry—the visible writing shows at once whether the imprint is right or wrong, and if correction is necessary, it's easy.

If you will come in to see him, a very pleasant mannered man will show you all the ins and outs of the UNDERWOOD, answer *your* questions and not try to be a salesman to you —unless *you* so wish. Why not come in to-day —at any business hour convenient to you?

UNDERWOOD TYPEWRITER COMPANY

(INCORPORATED)

241 BROADWAY, - - NEW YORK




AK
IF THERE'S PAIN
THAT'S ENOUGH
THE ANTIKAMNIA CHEMICAL COMPANY - ST. LOUIS, U.S.A.

Public Hygiene

is one of the most important questions now demanding the attention of the medical profession.

PUBLIC HYGIENE

is the title not only of the most important work on this subject, but the **ONLY** work covering **ALL** phases.

THE AUTHOR, Thomas S. Blair, M. D., brought to the task of preparation a practical knowledge gained through twenty-one years of special study of the medical, sociologic and engineering features of public health work.

NUMEROUS CONTRIBUTORS, each recognized as an authority in his department, have contributed special chapters.

THE U. S. GOVERNMENT and all the State Boards of Health have supplied invaluable data.

300 ILLUSTRATIONS, nearly all specially taken for this work, appear in the two volumes, which are probably the handsomest pieces of book making ever seen in a medical work.

PUBLIC HYGIENE

is in every sense authoritative and practical — it is not a book of untried theories, but a working hand book showing accomplished results.

PUBLIC HYGIENE

is issued in two handsome volumes, about 7x10 inches in size and 1⅛ inches thick — printed on specially made featherweight paper with the illustrations on the finest quality coated inserts. The binding is library buckram with leather labels. The two volumes are in a substantial box. The price is $10.00 net. **EXPRESS EXTRA.**

Order Your Set Now

and get a copy of the first large edition (already more than half sold). As a premium on prompt action we will send it with

ALL CHARGES PREPAID (See coupon)

RICHARD G. BADGER, PUBLISHER

194 BOYLSTON STREET, BOSTON

In preparation
"Developmental Pathology a Study in Degenerative Evolution" by Eugene S. Talbot, M. D.
Special circulars on request.

Enclosed find $10 for which send me one complete set of *Public Hygiene* — it is understood that *all charges are to be prepaid* in accordance with your special offer.

Name _____

Street _____

City and State _____

CONTENTS OF PUBLIC HYGIENE

I — Introductory; The Family versus the Community.
II — Hotels, Lodging Houses, Public Buildings.
III — Schools and Colleges.
IV — Penal Institutions and Hospitals for the Insane.
V — Maternities.
VI — Places of amusement and Dissipation, Parks, Seaside Resorts.
VII — Slums and Town Nuisances.
VIII — Rural Hygiene.
IX — State Departments and Boards of Health. What each State is Doing.
X — A Proposed Federal Bureau of Health.
XI — Local Boards of Health and Sanitary Officers.
XII — Army and Navy Hygiene. Public Health and Marine Hospital Service Camps.
XIII — The Coroner.
XIV — Quarantine.
XV — Infectious Diseases.
XVI — Immunity.
XVII — Epidemics.
XVIII — Disinfection.
XIX — Tuberculosis Sanatoria and Dispensaries.
XX — Home Hygiene. Interior Sanitary Installations.
XXI — Pure Foods and Drugs.
XXII — Public Works and Corporations.
XXIII — Public Carriers.
XXIV — Laboratory Methods in Health Work.
XXV — Medical Societies and Sanitation.

We want a few men of genuine ability to handle *Public Hygiene* in territory not yet covered. Write us to-day, giving references and the territory you desire. If it is still open we can offer a very attractive proposition.

Enclosed find $10 for which send me one complete set of *Public Hygiene* — it is understood that *all charges are to be prepaid* in accordance with your special offer.

Name _____

Street _____

City and State _____

THE FIRST AND ONLY J

Volume 32, Number 4

THE J
INE

OFFICIAL ORGAN O

THE ST

EDI

WINFIELD S. HALL, M. D.
H. O. MARCY, M. D., Bos
L. D. MASON, M. D., Bro
ALEXANDER MAC NICHOLL
W. L. HOWARD, M. D., W
D. R. BROWER, M. D., C
JOHN MADDEN, M. D., Pc
J. H. KELLOGG, M. D., B

RICHARD G. BADG

Entered as secon